Neighborhood Traffic Management
Program Guidelines

PURPOSE

The City of Chattanooga is continually striving to strengthen and protect its neighborhoods by improving the quality of life in residential areas. The desirability of Chattanooga neighborhoods as a place to live is directly affected by local traffic conditions. Safety hazards can be created by unnecessary through traffic in these neighborhoods or by motorists traveling at unsafe speeds on streets designed primarily for local access to abutting properties.

The City's Thoroughfare Plan is designed to control through traffic in residential areas and promote public safety by designating an arterial network to help channel extraneous traffic around neighborhoods. Permanently installed neighborhood traffic management devices have proven to be successful in protecting residential neighborhoods from the detrimental effects of extraneous traffic. Effective solutions to neighborhood traffic problems may require a combination of traffic control/diverter devices treating an entire area or neighborhood. However, a comprehensive approach must be taken to ensure that traffic is diverted in a manner consistent with the Thoroughfare Plan, so as not to unduly impact the rest of the transportation system or adversely affect other neighborhoods.

This document describes the Division of Traffic Engineering's Neighborhood Traffic Management Program (NTMP). The NTMP is an ongoing effort to resolve neighborhood traffic problems based on sound technical analysis and community participation.

DEFINITIONS

Local Street - *local streets* are those streets that are not designated as major streets or collector streets in the City of Chattanooga Thoroughfare Plan.
Traffic "Control" Devices - *traffic control devices* include signs, markings, traffic circles, traffic throats, non-restrictive curb extensions, and other devices within public right-of-way that affect the operation of vehicles but do not restrict access to a street.
Traffic "Diverter" Devices - *traffic diverter devices* include restrictive curb extensions, street closures, one-way operation, and other devices within the public right-of-way that restrict access to a street.
Petition Area - the *petition/study area* is defined as the "immediate affected" and "primary affected" areas.
Immediate Affected Area - the *immediate affected area* includes those streets that are experiencing traffic related problems and would most likely have a reduction in traffic after the installation of any traffic control/diverter devices.
Primary Affected Area - the *primary affected* area includes those streets that might experience increased traffic after installation of any traffic control/diverter devices in the immediate affected area.
Secondary Affected Area - the *secondary affected area* includes those streets that are indirectly affected by the installation of traffic control/diverter devices in the immediate affected area. Examples of this type would include a nearby street where the traffic patterns of residents are altered because of a traffic device even though their street in not directly affected.
Accident History - *accident history* relates to the number of correctable accidents that have been recorded during the past three years. Potential safety problems can be identified by analyzing prior accident data.
Traffic Volume - *traffic volume* refers to the number of vehicles passing a given point during a specified period of time. Daily (24-hour) traffic volume counts are utilized for NTMP analyses.
Traffic Speed - *traffic speed* refers to the rate of vehicle movement. The NTMP utilizes the 85^{th} percentile speed, i.e. 85 percent of the vehicles sampled are at or below a particular speed.

CRITERIA FOR TRAFFIC CONTROL/DIVERTER DEVICES

A. Only local streets in residential areas will be considered for the NTM program.
B. A limited number of permanently installed neighborhood traffic control/diverter devices should be used to achieve traffic management objectives.
C. Adequate automobile access to properties in the neighborhood must be accommodated.
D. Automobile access from the nearest arterial should be as direct as is practical.
E. Local access to neighborhood facilities (i.e. schools, parks, etc.) must be accommodated.
F. Appropriate means must be available, or be provided, to accommodate diverted traffic in a manner that will not unduly impact adjacent areas or the rest of the transportation system.
G. All permanently installed traffic control/diverter devices must be designed to allow emergency vehicle access either through or around them; otherwise a desirable alternative emergency access route must be established.
H. Permanent neighborhood traffic management devices should be located and designed to facilitate pedestrian circulation patterns.
I. Consideration will be given to the circulation and parking needs of the customers and employees of businesses within the project area.

PROCESS

A. Criteria for Participation in the Program

An evaluation process has been established for determining which projects should be included in the NTMP. The process requires completion of three phases prior to a location being considered for funding.

Preliminary Phase 1 - Community Support

No project will be considered without support from the citizens in the affected area. Responsibility for completion of this phase rests with the community and involves the following steps:

1. An individual or group must make a request for inclusion in the NTMP by calling the Traffic Engineering Division at the Department of Public Works at 757-5005.
2. A citizen committee of 4-6 persons should be formed to meet with the Traffic Engineering Division staff to discuss neighborhood concerns and define the petition area.
3. Petition forms will be given to the applicants, and signatures must be gathered from at least 51 percent of the households (owners or renters) within the petition area. Completed petitions can be mailed to:

ATTN: City Traffic Engineer
Traffic Engineering Division
City Hall - Room 32
l0l East 11th Street
Chattanooga, Tennessee 37402

Preliminary Phase 2 - Traffic Safety Analysis

Each project will be evaluated based on technical traffic data. Responsibility for completion of this step rests with the Traffic Engineering Division and involves the gathering of technical information to determine if a need exists for the installation of traffic management devices.

During this step, the Traffic Engineering Division will utilize traffic volume counts, speed surveys, and accident reports. In order to continue to be considered for the Program, the Traffic Engineering Division must determine that both a demonstrated need and a feasible traffic control solution exist. If a need and/or feasible solution cannot be shown, the project will be dropped from the list of potential improvements and the contact person listed on the petition will be notified by mail. Projects will be evaluated based on the criteria/point system provided in Table 1.

A location must accumulate at least three points to be included in the NTM program. Locations with a minimum of three points will then be prioritized. If a location has sufficiently high priority to compete for funds and the physical characteristics of the area allow for a feasible solution through this program, the contact person will be notified and a meeting will be arranged with the citizen committee. The full range of traffic management measures will be considered, including traffic diverter devices.

If a location does not accumulate three or more points, it will not be eligible for NTM program funding. However, the City Traffic Engineer will investigate the potential for non-restrictive traffic control devices. Traffic diverter devices that restrict accessibility will not be considered. If a feasible traffic control device that addresses neighborhood concerns can be identified, the City Traffic Engineer will take appropriate steps to implement the device(s).

B. Traffic Control Program Implementation

Based on past experience, legal requirements, and City policy, a process for project implementation has been developed involving a strong commitment on the part of both citizens and City staff. The process has four components: plan development, demonstration, final approval and design-construction. These phases are described on the following pages.

TABLE 1	
CRITERIA	**POINTS**
Accident History*	
0.500 - 0.875 accidents annually	1
0.876 - 1.250 accidents annually	2
1.251 - 1.625 accidents annually	3
1.626 - 2.000 accidents annually	4
2.001 - 2.375 accidents annually	5
2.376 - 2.750 accidents annually	6
Non-correctable intersection accidents exceed an average of 2.0 per year	½
Mid-block accidents exceed an average of 2.0 per year	
Traffic Volumes**	
0500 - 1000 vehicles per day	½
1001 - 1500 vehicles per day	1
1501 - 1900 vehicles per day	1½
1901 - 2300 vehicles per day	2
2301 - 2600 vehicles per day	2½
2601 - 2900 vehicles per day	3
Traffic Speeds***	
30.0 - 32.5 miles per hour	½
32.6 - 35.0 miles per hour	1
35.1 - 37.5 miles per hour	1½
37.6 - 40.0 miles per hour	2
40.1 - 42.5 miles per hour	2½
42.6 - 45.0 miles per hour	3
* Recorded correctable accidents: based on the past three years ** 24-hour traffic volume ***85th percentile speed	

PHASE 1 - PRELIMINARY PLAN DEVELOPMENT

Several steps are necessary during the initial development of the project:

1. A meeting will be held with the citizen committee to discuss the traffic problems, the analysis to date, possible solutions, and their probable effects, and the procedures which will be followed to implement a traffic management plan. A preferred solution or set of alternative solutions will be identified at this meeting.
2. A draft report will be written by the Traffic Engineering Division discussing the problem and the potential solutions. The content of the report will be based on community input, review by the Police and Fire Departments, and further traffic analysis. The report will be reviewed by all appropriate City departments.
3. The City Traffic Engineer will present the draft report and preliminary findings at a community meeting. Potential alternatives will be discussed and a preferred solution will be determined based on community input and staff recommendations.

The plan development phase may take up to three months.

PHASE 2 - DEMONSTRATION

The second phase of the project involves the demonstration of the concept plan selected in Phase 1. The following steps will take place:

1. Temporary physical devices will be placed in the street by the Traffic Engineering Division for an evaluation period of approximately two to four months. Revisions will be made as the need arises.
2. The City Traffic Engineer will prepare a final project report based on information collected during the demonstration. This information may include surveys of residents/business people within the area, community meetings, review by the Police and Fire Departments, and further traffic analysis.
3. The final report will be presented by the City Traffic Engineer at a community meeting, where results of the demonstration

will be discussed.

The entire demonstration phase takes approximately four to six months to complete.

PHASE 3 - FINAL APPROVAL PROCESS

The third phase of the project involves the following steps:

1. The citizen committee will petition neighborhood residents to determine the level of support for permanent installation of traffic control and/or traffic diverter devices. Signatures are required from at least 51 percent of the households (owners or renters). A post card survey may also be conducted to further assess the level of community support.
2. If 51 percent of the neighborhood residents support permanent installation of traffic control/diverter devices, then the Traffic Engineering Division will formally present their findings to either the Regional Planning Agency or the City Council depending upon the recommendation.
3. The final report and, if required, recommendation from the Regional Planning Agency will be presented to the City Council at another public hearing. The City Council will decide whether or not to pass a resolution or ordinance authorizing the installation/construction of permanent devices.

The final approval process will take approximately three to four months.

PHASE 4 - DESIGN AND INSTALLATION/CONSTRUCTION

This phase takes place in two steps:

1. Based on the demonstration, the location and visual appearance of the permanent device(s) will be designed. The final design will be reviewed by neighborhood residents and the Police and Fire Departments.
2. The traffic control/diverter devices will be constructed by City crews.
3. The design and construction phase will take approximately six to ten months.

Sample Petition Form

PETITION

Description of area of request: _____

We, the undersigned property owners or tenants, do respectfully petition the City of Chattanooga, Department of Public Works, Traffic Engineering Division to conduct a neighborhood traffic management study for the above described area.

Date submitted to the City of Chattanooga: _____

Contact person representing petitioners: _____

Phone: _____

FINAL PETITION

Description of area of request: _____

We, the undersigned property owners or tenants, support the demonstration project which has been implemented to improve traffic conditions in our neighborhood. We do respectfully petition the City of Chattanooga, Department of Public Works to replace the temporary traffic control devices with permanent installations.

Date submitted to the City of Chattanooga: _____

Contact person representing petitioners: _____

Phone: _____